

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-20 (Cancelled)

21. (New) A method for preserving an original schema of a table comprising a plurality of rows, the method comprising:

storing the original schema of the table in a designated table prior to performing a first schema change on the table, wherein the plurality of rows in the table are not self-describing prior to performance of the first schema change;

performing the first schema change on the table to create a new schema for the table;

defining each of one or more rows that are inserted into or updated in the table after performance of the first schema change using the new schema; and

making each of the one or more inserted or updated rows a self-describing row by storing metadata describing the new schema in the row.

22. (New) The method of claim 21, further comprising:

rebuilding the table using a valid backup copy of the table,

wherein, when a row of the valid backup copy is self-describing, metadata stored in the row is used to rebuild a corresponding row of the table and

wherein, when the row of the valid backup copy is not self-describing, the original schema stored in the designated table is used to rebuild the corresponding row of the table.

23. (New) The method of claim 22, wherein a backup copy of the table is valid when data in the backup copy is not corrupted or otherwise unsuitable for data recovery.

24. (New) The method of claim 21, further comprising:

removing the original schema of the table from the designated table responsive to all of the rows in the table being self-describing.

25. (New) The method of claim 21, wherein the designated table is a catalog table.

26. (New) The method of claim 21, wherein having each row in the table defined by metadata stored in the row or by the original schema stored in the designated table allows a backup copy of the table that was created after performance of the first schema change and before insertion or update of the one or more rows to be used for data recovery.

27. (New) A computer program product comprising a computer readable medium, the computer readable medium including a computer readable program for preserving an original schema of a table comprising a plurality of rows, wherein the computer readable program when executed on a computer causes the computer to:

store the original schema of the table in a designated table prior to performing a first schema change on the table, wherein the plurality of rows in the table are not self-describing prior to performance of the first schema change;

perform the first schema change on the table to create a new schema for the table;

define each of one or more rows that are inserted into or updated in the table after performance of the first schema change using the new schema; and

make each of the one or more inserted or updated rows a self-describing row by storing metadata describing the new schema in the row.

28. (New) The computer program product of claim 27, wherein the computer readable program when executed on the computer further causes the computer to:

rebuild the table using a valid backup copy of the table,

wherein, when a row of the valid backup copy is self-describing, metadata stored in the row is used to rebuild a corresponding row of the table and

wherein, when the row of the valid backup copy is not self-describing, the original schema stored in the designated table is used to rebuild the corresponding row of the table.

29. (New) The computer program product of claim 28, wherein a backup copy of the table is valid when data in the backup copy is not corrupted or otherwise unsuitable for data recovery.

30. (New) The computer program product of claim 27, wherein the computer readable program when executed on the computer further causes the computer to:

remove the original schema of the table from the designated table responsive to all of the rows in the table being self-describing.

31. (New) The computer program product of claim 27, wherein the designated table is a catalog table.

32. (New) The computer program product of claim 27, wherein having each row in the table defined by metadata stored in the row or by the original schema stored in the designated table allows a backup copy of the table that was created after performance of the first schema change and before insertion or update of the one or more rows to be used for data recovery.

33. (New) A system for preserving an original schema of a table comprising a plurality of rows, the system comprising:

a designated table operable to store the original schema of the table, the original schema being stored in the designated table prior to performance of a first schema change on the table, wherein the plurality of rows in the table are not self-describing prior to performance of the first schema change; and

a first mechanism operable to:

perform the first schema change on the table to create a new schema for the table,
define each of one or more rows that are inserted into or updated in the table after performance of the first schema change using the new schema, and

make each of the one or more inserted or updated rows a self-describing row by storing metadata describing the new schema in the row.

34. (New) The system of claim 33, further comprising:
a second mechanism operable to rebuild the table using a valid backup copy of the table,
wherein, when a row of the valid backup copy is self-describing, metadata stored in the row is used to rebuild a corresponding row of the table and
wherein, when the row of the valid backup copy is not self-describing, the original schema stored in the designated table is used to rebuild the corresponding row of the table.
35. (New) The system of claim 34, wherein a backup copy of the table is valid when data in the backup copy is not corrupted or otherwise unsuitable for data recovery.
36. (New) The system of claim 33, further comprising:
a third mechanism operable to remove the original schema of the table from the designated table responsive to all of the rows in the table being self-describing.
37. (New) The system of claim 33, wherein the designated table is a catalog table.
38. (New) The system of claim 33, wherein having each row in the table defined by metadata stored in the row or by the original schema stored in the designated table allows a backup copy of the table that was created after performance of the first schema change and before insertion or update of the one or more rows to be used for data recovery.